Adele Chinda

85B Pobedy, Belgorod, 308015

in Linkedin Github Google Scholar

Research Interests

Machine Learning Algorithms and Techniques, Computer Vision and Image Processing, Natural Language Processing and Understanding, Robotics and Autonomous Systems, Intelligent Control **Systems**

Education

Belgorod State University

Sept 2020 - July 2024 (Expected)

BSc in Applied Computer Science

GPA: 3.87/4.0

Supervisor: Assoc. Prof. Bolgova Evgenia

Publications

Automated Hyperparameter Optimization [link] World Science: Problems and Innovations Adele Chinda, Maxim Pamanin	2023
Transformer Architecture In Artificial Intelligence [link] Global Science <u>Adele Chinda</u> , Vladislav Gromiychuk	2023
Support Vector Machines [link] Modern Scientific Knowledge Adele Chinda, Nikita Derevlev	2023
Perceptron-Based Deep Learning: A Literature Review [link] Global Science Adele Chinda	2023
Analyzing the Dynamics of Recurrent Neural Networks [link] World Science: Problems and Innovations Adele Chinda, Viktor Dorokhov	2023
Development of a Computing Cluster Based on NVIDIA TESLA * [link] International Center for Scientific Cooperation "Science and Education" Adele Chinda	2022

Experience

AI and Robotics Lab - Belgorod State University

July 2023 - Present

Undergraduate Research Assistant | Supervisor: Prof. Olga Khudasova

• Developing an intelligent control algorithm for a non-linear system that would enhance the performance of robots and automated systems.

Open School of Engineering

*published in Russian Language

September 2022 - May 2023

AI Developer | Supervisor: Prof. Olga Khudasova

• Significantly contributed to a project with a focus on developing a Drone Navigation System at every stage, which included design, implementation, testing, and deployment.

Institute of Engineering and Digital Technologies - BSU

May 2022 - July 2022

Undergraduate Research Assistant | Supervisor: Prof. Bugaeva Ekaterina

· Worked on the re-engineering of a real estate agency, incorporating an AI-powered CRM system for housing prices prediction and automation of agency workflow.

Selected Projects

Traver - AI powered stock portfolio manager

· Integrated artificial intelligence techniques with the Alpaca Markets API to develop an AI-powered stock market prediction application, providing users personalized buy and sell recommendations.

Computer Vision-Based Navigation System for Drones (State-Level Project)

- Developed a novel algorithm for tracking the drone's position and orientation using a combination of sensors.
- Implemented a robust obstacle avoidance system that allowed the drone to safely navigate in complex environments.

Voice Assistant: GPT-3.5-turbo + Bing GPT-4 [link]

• Designed a voice-activated assistant that uses NLP and machine learning techniques to understand and respond to user input. The assistant runs on both Microsoft Bing GPT-4 and OpenAI GPT-3.5-turbo.

Language Classification System [link]

• Implemented a language classification system that preprocesses a dataset of text samples, extracts linguistic features, analyzes feature correlations, trains a decision tree classifier, evaluates the model's performance, and enables model saving and loading.

Professional Activities

Russian Association of Artificial Intelligence (РАИИ) workshop 2023 (website)

Russian TECH WEEK 2023 (website)

ACM AI/ML TechTalk webinar (website)

Innopolis AI Conference (website)

Blog Posts

Study Journey [link]

CNN vs RNN [link]

Kernel Trick [link]

Support Vector Machines [link]

K-Nearest Neighbors [link]

Transfer Learning in Machine Learning [link]

Skills

Programming Languages: Python, MATLAB, Java, JavaScript, C++, Bash

Libraries and Frameworks: TensorFlow, Keras, PyTorch, HuggingFace, Pandas, Scikit-learn, Numpy

Languages: English (Professional), Russian (Fluent), Yoruba (Native), Spanish (Novice)